NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT BIOGRAPHICAL DATA SHEET

NAME: Loren J. Shriver

ORAL HISTORY: 16 December 2002

18 December 2002

EDUCATIONAL BACKGROUND:

B.S., Aeronautical Engineering, United States Air Force Academy, Colorado Springs, CO, 1967

M.S., Astronautical Engineering, Purdue University, West Lafayette, IN, 1968

PRE-NASA EXPERIENCE:

United States Air Force (1963-1993)

- Completed M.S. at Purdue University (1967-1968)
- T-38 Academic Instructor Pilot, Vance Air Force Base, OK (1969-1973)
- F-4 combat crew training, Homestead Air Force Base, FL (1973)
- Air Force Fighter Pilot, overseas tour in Thailand (1973-1974)
- USAF Test Pilot School, Edwards Air Force Base, CA (1975)
- Air Force Test Pilot, 6512th Test Squadron, Edwards AFB (1975)
- Test Pilot, F-15 Joint Test Force, Edwards AFB (1976-1978)
- Detailed to NASA Johnson Space Center (1978-1993)
- Retired as Colonel (1993)

NASA EXPERIENCE:

NASA Johnson Space Center, Houston, TX (1978-1993)

- Astronaut, Astronaut Office, Flight Operations Directorate (1978-1993)
- Deputy Chief, Astronaut Office (1992-1993)

NASA Kennedy Space Center, FL (1993-2000)

- Space Shuttle Program Manager, Launch Integration (1993-1997)
- Deputy Director, Launch and Payload Processing (1997-2000)

POST-NASA EXPERIENCE:

United Space Alliance, Houston, TX (2000-present)

• Deputy Program Manager, Operations, Houston, TX (2000-present)

MISSIONS:

STS 51-C (Discovery)

- Crew: Commander Thomas K. Mattingly II, Pilot Loren J. Shriver, Mission Specialist 1 Ellison S. Onizuka, Mission Specialist 2 James F. Buchli, Payload Specialist 1 Gary E. Payton
- Launched: 24 January 1985 at 2:50:00 P.M. EST from Kennedy Space Center, FL

- Duration: 3 days, 1 hour, 33 minutes, 23 seconds
- Landed: 27 January 1985 at 4:23:23 P.M. EST Kennedy Space Center, FL
- Mission Highlights: First Department of Defense mission. Resurrection of the cancelled STS-10 mission. Extreme security surrounding preparation and training. Payload classified; reportedly the Magnum satellite, a National Security Agency satellite to monitor military transmissions from the Soviet Union and China.

STS-31 (*Discovery*)

- Crew: Commander Loren J. Shriver, Pilot Charles F. Bolden, Mission Specialist 1 Steven A. Hawley, Mission Specialist 2 Bruce McCandless II, Mission Specialist 3 Kathryn D. Sullivan
- Launched: 24 April 1990 at 8:33:51 EDT from Kennedy Space Center, FL
- Duration: 5 days, 1 hour, 16 minutes, 6 seconds
- Landed: 29 April 1990 at 6:49:57 A.M. PDT Edwards Air Force Base, CA
- Mission Highlights: This mission was responsible for deploying the Hubble Space Telescope (HST), which the crew accomplished on 25 January. Because of the need to place the telescope above the atmospheric haze, STS-31 reached a record altitude of 380 miles (600 km). Following the deployment, the crew conducted research on orbiter radiation, the effects of weightlessness on electrical arcs, and protein crystal growth. The crew operated two IMAX cameras during the mission.

STS-46 (*Atlantis*)

- Crew: Commander Loren J. Shriver, Pilot Andrew M. Allen, Mission Specialist 1
 Jeffrey A. Hoffman, Mission Specialist 2 Franklin R. Chang-Diaz, Mission Specialist 3 Claude Nicollier, Mission Specialist 4 Marsha S. Ivins, Payload Specialist 1 Franco Malerba
- Launched: 31 July 1992 at 9:56:48 EDT from Kennedy Space Center, FL
- Duration: 7 days, 23 hours, 15 minutes, 3 seconds
- Landed: 8 August 1992 at 9:11:50 A.M. EDT Kennedy Space Center, FL
- Mission Highlights: The two primary objectives of STS-46 were the deployment of the ESA European Retrievable Carrier (EURECA) and the NASA/Italian Space Agency Tethered Satellite System (TSS). EURECA deployment was delayed by one day but was eventually successful. Aboard EURECA were several scientific experiments that NASA expected to be retrieved in future mission STS-57. The TSS was also delayed one day, and a jammed tether caused the satellite to reach only 860 feet from the orbiter, as opposed to 12.5 miles. The crew freed the tether, but a second jam resulted in the decision to reel it in and stow it for examination once back on Earth. In addition to the EURECA and TSS, STS-46 conducted a host of scientific experiments and landed one day late in order to complete them. Notable among these were a study of the pituitary growth hormone and an examination of low-orbit atomic oxygen erosion.

AWARDS & CITATIONS:

- USAF Distinguished Flying Cross
- Defense Meritorious Service Medal
- Air Force Meritorious Service Medal
- Air Force Commendation Medal
- NASA Distinguished Service Medal
- NASA Outstanding Leadership Medal
- NASA Space Flight Medal (1985, 1990, 1992)
- Defense Superior Service Medal, 1985
- Presidential Commendation, Federal Incentive Awards Program, 1986
- American Astronautical Society 1990 Flight Achievement Award, 1990
- American Institute of Aeronautics and Astronautics Haley Space Flight Award, 1991
- Meritorious Executive Award, 1997

SELECT PUBLICATIONS & PATENTS:

Contributing author on various technical reports regarding F-15 and T-38 aircraft

REFERENCES:

David M. Harland, <u>The Space Shuttle: Roles, Missions, and Accomplishments</u> (Chichester: John Wiley & Sons, in association with Praxis Publishing, 1998), 49, 82, 91, 193, 224.

Douglas B. Hawthorne, Men and Women of Space (San Diego: Univelt, 1992), 669-70.

Johnson Space Center Announcement, 97-054, 9 June 1997, "Key Personnel Assignments," NASA Lyndon B. Johnson Space Center, Houston, TX.

Johnson Space Center News Release, "NASA Announces Three Shuttle Crews," JSC 88-088, 17 March 1988, Public Affairs Office, NASA Lyndon B. Johnson Space Center, Houston, TX.

Kennedy Space Center Press Release, "Astronaut, Senior KSC Manager Shriver Departs NASA," KSC 29-00, 7 April 2000, Kennedy Space Center Public Affairs Office Homepage, online, http://www-pao.ksc.nasa.gov/kscpao/release/2000/29-00.htm (Article Dated 7 April 200; Accessed 23 May 2002).

Kennedy Space Center News Release, "Kennedy Space Center Announces New Appointments," KSC 97-128, 9 June 1997, NASA John F. Kennedy Space Center, FL.

Loren J. Shriver NASA Biographical Data Sheet (August 1997), Loren J. Shriver Key Personnel Files, Awards Office, NASA Lyndon B. Johnson Space Center, Houston, TX.

Loren J. Shriver NASA Biographical Data Sheet (May 1990), Loren J. Shriver Key Personnel Files, Awards Office, NASA Lyndon B. Johnson Space Center, Houston, TX.

"Mission Highlights," NASA Spacelink Homepage, Online, http://spacelink.nasa.gov/NASA.Projects/Human.Exploration.and.Development.of.Space/Human.Space.Flight/Shuttle/Shuttle.Missions/Flight.049.STS-46/Mission.Highlights.html (Accessed 23 May 2002).

NASA Headquarters News Release, "Pearson Announces Shuttle Program Adjustments," 93-49, 19 March 1993, NASA Headquarters, Washington, D. C.

"Personal Data," Astro Info Service, Online, http://www.astroinfoservice.co.uk/biogs/shriver.html (Last Updated 8 January 2001; Accessed 24 May 2002).

"Shuttle Mission Archive, STS-31 (35)," Kennedy Space Center Homepage, Online, http://www.~pao.ksc.nasa.gov/kscpao/shuttle/missions/sts-31/mission-sts-31.html (Last Updated 28 September 2000; Accessed 24 May 2002).

"Shuttle Mission Archive, STS-46 (49)," Kennedy Space Center Homepage, Online, http://www.~pao.ksc.nasa.gov/kscpao/shuttle/missions/sts-46/mission-sts-46.html (Last Updated 23 May 2002; Accessed 24 May 2002).

"Shuttle Mission Archive, STS 51-C (15)," Kennedy Space Center Homepage, Online, http://www.ksc.nasa.gov/shuttle/missions/51-c/mission-51-c.html (Last Updated 29 June 2001; Accessed 28 May 2002).

BIOGRAPHICAL DATA SHEET CREATED: 11 JUNE 2002